FCC Radio Test Report

FCC ID	:	**YOM-VSCANAIRWC**
Equipment	:	**Vscan Air Charger**
Brand Name	:	**GE Healthcare**
Model Name	:	**GP200304**
Applicant	:	**GE Healthcare John F Welch Technology Center, Odyssey, #122,EPIP Phase II, Whitefield, Bangalore, 560066 India.**
Manufacturer	:	**BizLink (Kunshan) Co., Ltd. Jiangsu, China No.168, Nanhe Rd., Kunshan Economic & Technology Development Zone, Kunshan City, Jiangsu 215300, China**
Standard	:	**47 CFR FCC Part 15.209**

The product was received on Mar. 23, 2022, and testing was started from Mar. 30, 2022 and completed on Mar. 31, 2022. We, SPORTON INTERNATIONAL INC. Hsinhua Laboratory, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.10-2013 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Hsinhua Laboratory, the test report shall not be reproduced except in full.

Approved by: Jackson Tsai

SPORTON INTERNATIONAL INC. Hsinhua Laboratory

No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)

Table of Contents

History of this test report

Report No.	Version	Description	Issued Date
FR232318AW	01	Initial issue of report	Jul. 04, 2022

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
1.1.2	15.203	Antenna Requirement	PASS	-
3.1	15.207	AC Power-line Conducted Emissions	PASS	-
3.2	15.209	Transmitter Radiated Emissions	PASS	-
3.3	15.215(c)	Emission Bandwidth	PASS	-

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
None

Reviewed by: Ben Tseng
Report Producer: Ann Hou

1 General Description

1.1 Information

1.1.1 General Information

Wireless Power Transfer General Information			
Frequency Range	**Modulation**	**Operating Freq. (kHz)**	**Field Strength (dBuV/m)**
112-205 kHz	FSK	119.874	84.80
Power Transfer Method	**Output power from each primary coil**	**That may have multiple primary coils**	**Operating Method**
Multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	≤ 15W	No	Client directly contact
Note 1: Field strength performed peak level at 3m.			

1.1.2 Antenna Information

Ant.	Brand	Model Name	Antenna Type	Connector
1	CHILISIN	BTWW00505024TXB011	Wireless charging antenna coils	NA

1.1.3 EUT Information

Operational Condition	
EUT Power Type	From AC Adapter
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.:
☐	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.:
☐	Other:

1.1.4 Test Signal Duty Cycle

Operated Mode for Worst Duty Cycle	
☒	Operated normally mode for worst duty cycle
☐	Operated test mode for worst duty cycle
Test Signal Duty Cycle (x)	
☒	100%

1.2 Testing Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- 47 CFR FCC Part 15
- ANSI C63.10-2013

The following reference test guidance is not within the scope of accreditation of TAF:

- KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01
- KDB 414788 D01 v01r01

1.3 Testing Location Information

Test Lab.：Sporton International Inc. Hsinhua Laboratory				
☒ Hsinhua	**ADD:** No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333411, Taiwan (R.O.C.)			
(TAF: 3785**)**	**TEL:** 886-3-327-3456		**FAX:** 886-3-327-0973	
Test site Designation No. TW3785 with FCC.				
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**
AC Conduction	CO04-HY	Billy	23.0~23.1°C / 56~57%	31/Mar/2022
RF Conducted	TH06-HY	Johnny	20.7~25.3°C / 53~62%	30/Mar/2022
Radiated	03CH02-HY	Jack	21.5~22.4°C / 52~63%	30/Mar/2022
☐ Wen 33rd. St.	**ADD:** No.14-1, Ln. 19, Wen 33rd St., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.)			
(TAF: 3785**)**	**TEL:** 886-3-318-0787		**FAX:** 886-3-318-0287	
Test site Designation No. TW0008 with FCC.				

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	0.9 dB	Confidence levels of 95%
Radiated Emission (9kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.0 dB	Confidence levels of 95%
Temperature	0.41 °C	Confidence levels of 95%
Humidity	3.4 %	Confidence levels of 95%

2 Test Configuration of EUT

2.1 Test Channel Mode

Test Software	N/A

Note: The EUT transmits RF signal continuously by itself

Mode	Power Setting
WPC	-
0.1127MHz	default

2.2 The Worst Case Configuration

Mode	Field Strength (dBuV/m at 3 m)	Charger Frequencies (kHz)
WPC	84.80	119.874
Note.1: Wireless charger were performed all charging conditions including variable loading and non-charging operation, the worst mode is full charging loading. Note.2: Wireless charger frequencies are variable frequency range (112-205 kHz) and depend on charging loading.		

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	AC power-line conducted emissions
Condition	AC power-line conducted measurement for line and neutral Test Voltage: 120Vac / 60Hz
Operating Mode	CTX
	Adapter mode

The Worst Case Mode for Following Conformance Tests			
Tests Item	Transmitter Radiated Emissions, Emission Bandwidth		
Test Condition	Radiated measurement		
Operating Mode	CTX		
	Adapter mode		
Orthogonal Planes of EUT	**X Plane**	**Y Plane**	**Z Plane**
			
Worst Planes of EUT		V	

2.4 Accessories

Accessories				
AC Adapter (US Plug)	**Brand Name**	XP Power	**Model Name**	VEU10US050-US
	Power Rating	I/P: 100 - 240 Vac, 0.3 A, O/P: 5 Vdc, 2.1 A		
USB Cable	**Brand Name**	BizLink	**Model Name**	117G0-089750-R1
	Signal Line	1.2 meter, shielded cable, w/o ferrite core		

Reminder: Regarding to more detail and other information, please refer to user manual.

2.5 Support Equipment

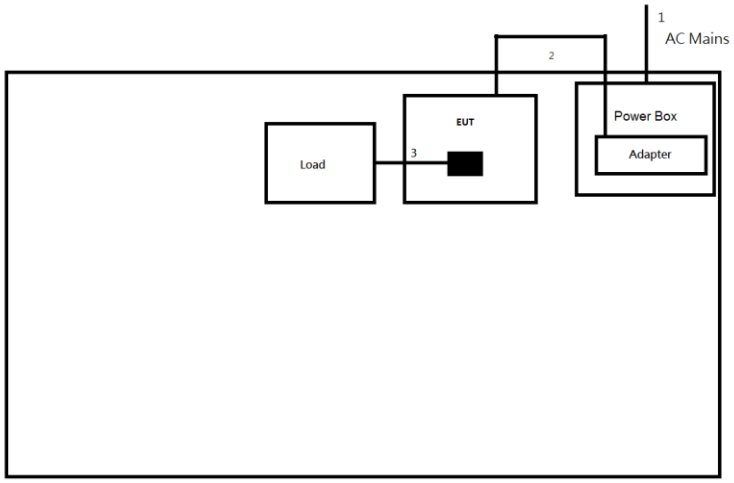
Support Equipment – AC Conduction					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	WPC Load	Bizlink	N/A	-	Provided by Customer
2	AC Power cable	Power Sync	TPCMRN0018	-	-

Support Equipment – Conducted					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	WPC Load	Bizlink	N/A	-	Provided by Customer

Support Equipment – Radiated					
No.	**Equipment**	**Brand Name**	**Model Name**	**FCC ID**	**Remark**
1	WPC Load	Bizlink	N/A	-	Provided by Customer
2	AC Power cable	Power Sync	TPCMRN0018	-	-

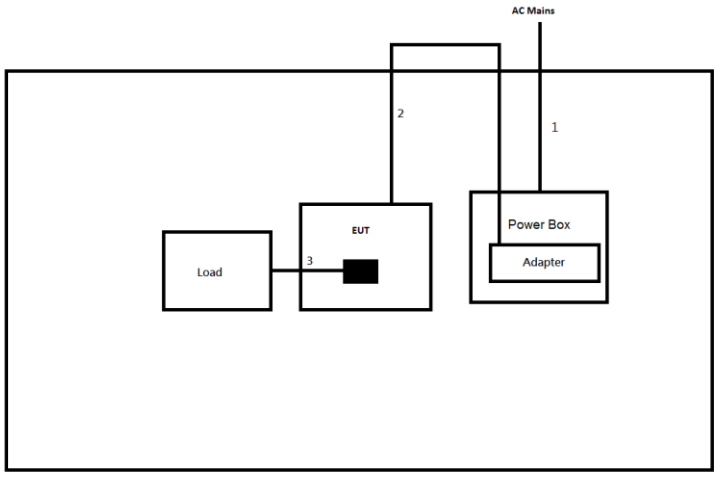
2.6 Test Setup Diagram

Test Setup Diagram – AC Line Conducted Emission Test



Item	Connection	Shielded	Length(m)
1	AC Power cable	No	1.8
2	USB cable	Yes	1.2
3	DC Power cable	No	1.0

Test Setup Diagram - Radiated Test



Item	Connection	Shielded	Length(m)
1	AC Power cable	No	1.8
2	USB cable	Yes	1.2
3	DC Power cable	No	1.0

3 Transmitter Test Result

3.1 AC Power-line Conducted Emissions

3.1.1 AC Power-line Conducted Emissions Limit

AC Power-line Conducted Emissions Limit		
Frequency Emission (MHz)	**Quasi-Peak**	**Average**
0.15-0.5	66 - 56 *	56 - 46 *
0.5-5	56	46
5-30	60	50
Note 1: * Decreases with the logarithm of the frequency.		

3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

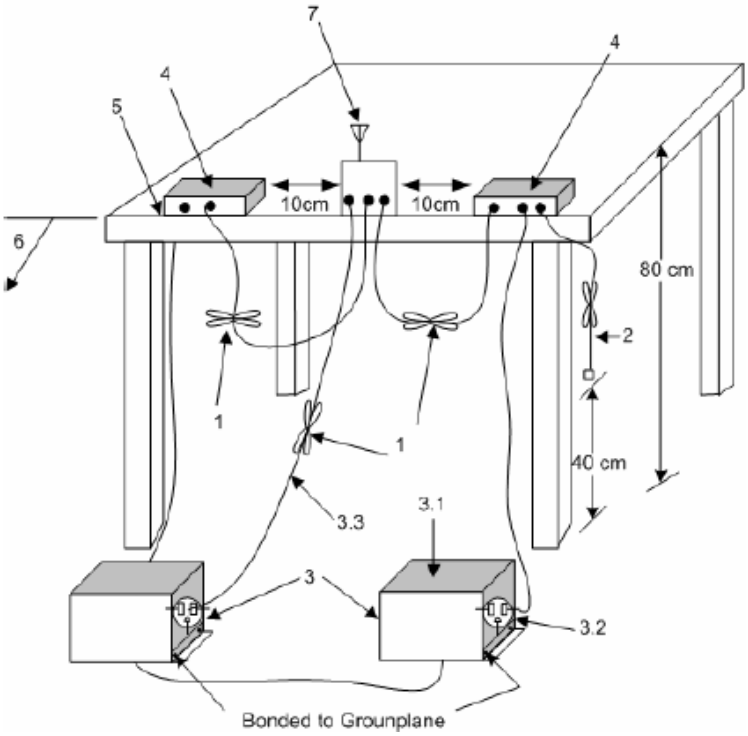
Test Method	
☒	Refer as ANSI C63.10-2013, clause 6.2 for AC power-line conducted emissions.
☒	If AC conducted emissions fall in operating band, then following below test method confirm final result.
☐	Accept measurements done with a suitable dummy load replacing the antenna under the following conditions: (1) Perform the AC line conducted tests with the antenna connected to determine compliance with FCC 15.207 limits outside the transmitter's fundamental emission band; (2) Retest with a dummy load to determine compliance with FCC 15.207 limits within the transmitter's fundamental emission band.
☒	For a device with a permanent antenna operating at or below 30 MHz, accept measurements done with a suitable dummy load, in lieu of the permanent antenna under the following conditions: (1) Perform the AC line conducted tests with the permanent antenna to determine compliance with the FCC 15.207 limits outside the transmitter's fundamental emission band; (2) Retest with a dummy load in lieu of the permanent antenna to determine compliance with the FCC 15.207 limits within the transmitter's fundamental emission band.

3.1.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) +LISN(LISN Factor) + CL(Cable Loss) + AT(Attenuator).

3.1.5 Test Setup

AC Power-line Conducted Emissions



1—Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 cm to 40 cm long.
2—The I/O cables that are not connected to an accessory shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
3—EUT connected to one LISN. Unused LISN measuring port connectors shall be terminated in 50Ω loads. LISN may be placed on top of, or immediately beneath, reference ground plane.
3.1—All other equipment powered from additional LISN(s).
3.2—A multiple-outlet strip may be used for multiple power cords of non-EUT equipment.
3.3—LISN at least 80 cm from nearest part of EUT chassis.
4—Non-EUT components of EUT system being tested.
5—Rear of EUT, including peripherals, shall all be aligned and flush with edge of tabletop.
6—Edge of tabletop shall be 40 cm removed from a vertical conducting plane that is bonded to the ground plane.
7—Antenna can be integral or detachable. If detachable, then the antenna shall be attached for this test.

3.1.6 Test Result of AC Power-line Conducted Emissions

Refer as Appendix A

3.2 Transmitter Radiated Emissions

3.2.1 Transmitter Radiated Emissions Limit

Transmitter Radiated Emissions Limit			
Frequency Range (MHz)	**Field Strength (uV/m)**	**Field Strength (dBuV/m)**	**Measure Distance (m)**
0.009~0.490	2400/F(kHz)	48.5 - 13.8	300
0.490~1.705	24000/F(kHz)	33.8 - 23	30
1.705~30.0	30	29	30
30~88	100	40	3
88~216	150	43.5	3
216~960	200	46	3
Above 960	500	54	3

Note 1: Test distance for frequencies at or above 30 MHz, measurements may be performed at a distance other than the limit distance provided they are not performed in the near field and the emissions to be measured can be detected by the measurement equipment. When performing measurements at a distance other than that specified, the results shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade (inverse of linear distance for field-strength measurements, inverse of linear distance-squared for power-density measurements).

Note 2: Test distance for frequencies at below 30 MHz, measurements may be performed at a distance closer than the EUT limit distance; however, an attempt should be made to avoid making measurements in the near field. When performing measurements below 30 MHz at a closer distance than the limit distance, the results shall be extrapolated to the specified distance by either making measurements at a minimum of two or more distances on at least one radial to determine the proper extrapolation factor or by using the square of an inverse linear distance extrapolation factor (40 dB/decade). The test report shall specify the extrapolation method used to determine compliance of the EUT.

Note 3: the frequency bands 9-90 kHz, 110-490 kHz measurements employing an average detector and other below 1GHz measurements employing a CISPR quasi-peak detector.

3.2.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

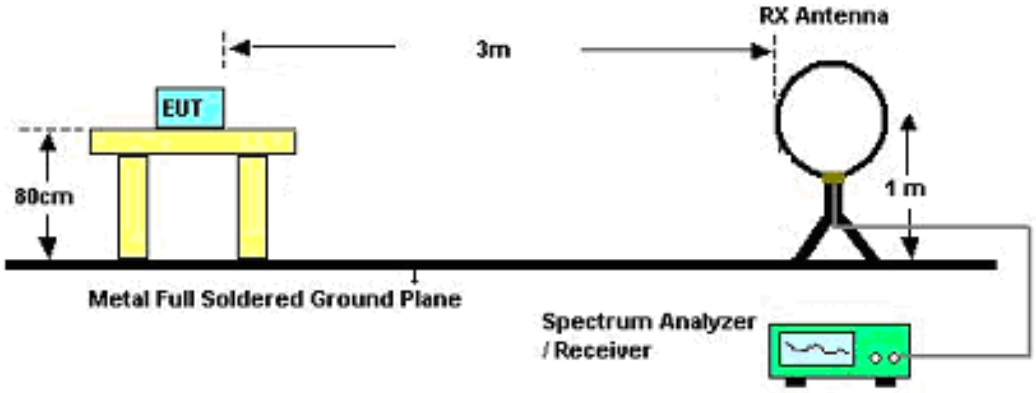
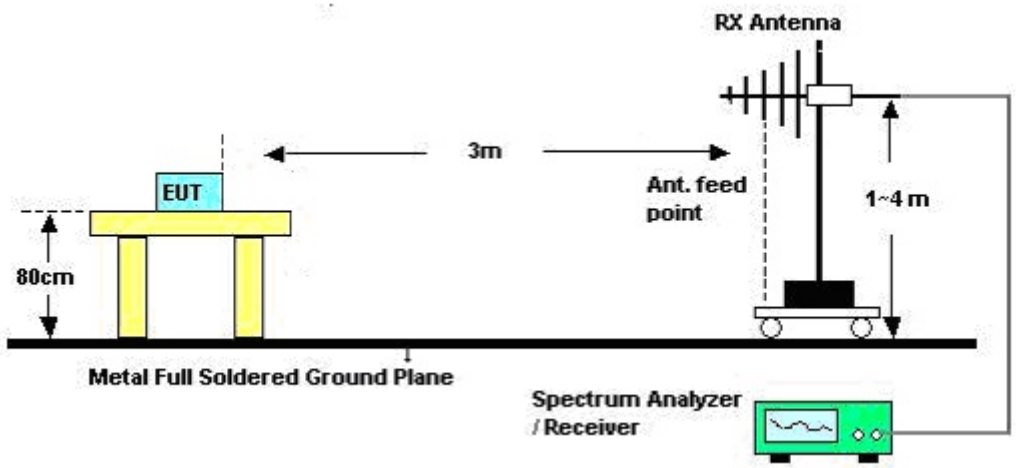
3.2.3 Test Procedures

Test Method	
☒	Refer as ANSI C63.10, clause 6.5 for radiated emissions from 30 MHz to 1 GHz and test distance is 3m.
☒	Refer as ANSI C63.10, clause 6.4 for radiated emissions from below 30 MHz the frequency bands 9-90 kHz, 110-490 kHz measurements employing an average detector and other below 30MHz measurements employing a CISPR quasi-peak detector. Test distance is 3 m.
☒	At frequencies below 30 MHz, measurements may be performed at a distance closer than that specified in the requirements; however, an attempt should be made to avoid making measurements in the near field. Pending the development of an appropriate measurement procedure for measurements performed below 30 MHz, when performing measurements at a closer distance than specified, the results shall be following below methods.
☐	The results shall be extrapolated to the specified distance by making measurements at a minimum of two distances on at least one radial to determine the proper extrapolation factor.
☒	The results shall be by using the square of an inverse linear distance extrapolation factor (40 dB/decade).
☒	For radiated measurement. Loop antenna was rotated about the horizontal and vertical axis and the equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted field strength level.
☒	The any unwanted emissions level shall not exceed the fundamental emission level.
☒	All amplitude of spurious emissions that are attenuated by more than 20 dB below the permissible value has no need to be reported.
☒	KDB 414788 Open-Field Test Sites and Chamber Correlation Justification.
☒	Based on FCC 15.31(f)(2): measurements may be performed at a distance closer than that specified in regulations; however, an attempt should be made to avoid making measurements in the near field.
☒	Open-field site and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

3.2.4 Measurement Results Calculation

The measured Level is calculated using:
Corrected Reading: Raw(Read Level) + AF(Antenna Factor) + CL(Cable Loss) - PA(Preamp Factor)

3.2.5 Test Setup

Emissions in Restricted Frequency Bands
9kHz ~30MHz

30MHz~1GHz


3.2.6 Transmitter Radiated Emissions (Below 30MHz)

Refer as Appendix B

3.2.7 Transmitter Radiated Emissions (Above 30MHz)

Refer as Appendix B

3.3 Emission Bandwidth

3.3.1 Emission Bandwidth Limit

Emission Bandwidth Limit
N/A

3.3.2 Measuring Instruments

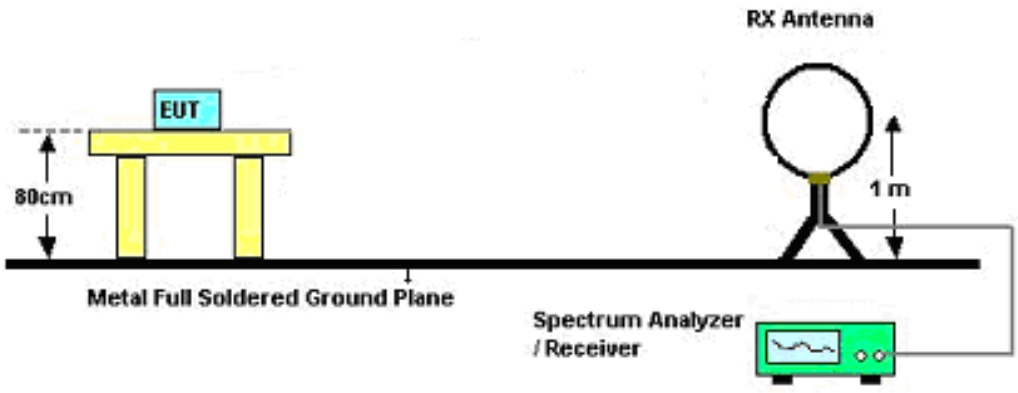
Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method	
☒	Because the measured signal is CW or CW-like adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.
☒	For radiated measurement. Loop antenna was rotated about the horizontal and vertical axis and the equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted field strength level.

3.3.4 Test Setup

Emission Bandwidth



3.3.5 Test Result of Emission Bandwidth

Refer as Appendix C

4 Test Equipment and Calibration Data

Instrument for AC Conduction

Instrument	Manufacturer / Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
EMI Test Receiver	R&S	ESR3	102051	9kHz ~ 3.6GHz	21/May/2021	20/May/2022
Two-Line V-Network	R&S	ENV 216	101274	9kHz – 30MHz	13/May/2021	12/May/2022
RF Cable 5m	TITAN	TITAN	CO04-cable-01	9 kHz~200MHz	01/Mar/2022	28/Feb/2023
Impuls Begrenzer Pulse Limiter	SCHWARZBECK	VTSD 9561-F	9561-F041	9kHz ~ 30MHz	26/Oct/2021	25/Oct/2022
Software	Sporton	SENSE-EMI	V5.10.7	-	NCR	NCR

NCR: No Calibration Required

Instrument for Conducted Test

Instrument	Manufacturer / Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
Signal Analyzer	R&S	FSV 40	101029	10Hz~40GHz	20/Oct/2021	19/Oct/2022
SENSE-NFC	Sporton	V5.11.0	N/A	N/A	N/A	N/A

Instrument for Radiated Test

Instrument	Manufacturer / Brand	Model No.	Serial No.	Spec.	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH02-HY	30MHz~1GHz 3m	02/Aug/2021	01/Aug/2022
Signal Analyzer	R&S	FSV40	101500	9kHz~40GHz	12/Oct/2021	11/Oct/2022
Amplifier	Agilent	8447D	2944A11149	100kHz~1.3GHz	29/Jun/2021	28/Jun/2022
Bilog Antenna & 5dB Attenuator	SCHAFFNER / MTJ	CBL 6112B / MTJ6102-05	2723 / 2	30MHz~1GHz	04/Sep/2021	03/Sep/2022
RF Cable	MVE	400LL	MVE-1-0802	9kHz~30MHz	05/May/2021	04/May/2022
RF Cable	MVE	400LL	MVE-1-0802	30MHz~1GHz	05/May/2021	04/May/2022
Loop Antenna	TESEQ	HLA 6120	31244	9kHz~30MHz	18/Mar/2022	17/Mar/2023
EMI Test Receiver	R&S	ESR3	102052	9kHz~3.6GHz	19/Apr/2021	18/Apr/2022
SENSE-303417	Sporton	V5.10.4	N/A	N/A	N/A	N/A

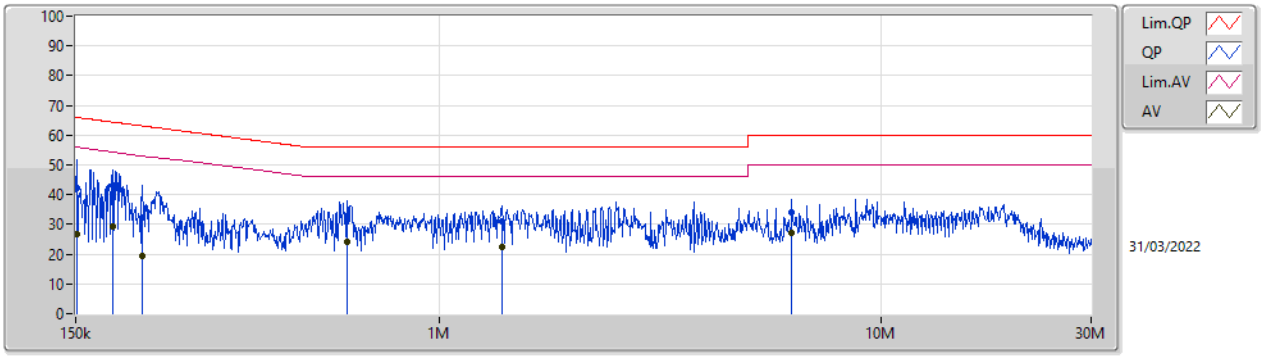
Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition
Mode 1	Pass	QP	186.085k	44.99	64.20	-19.21	Neutral

Mode config

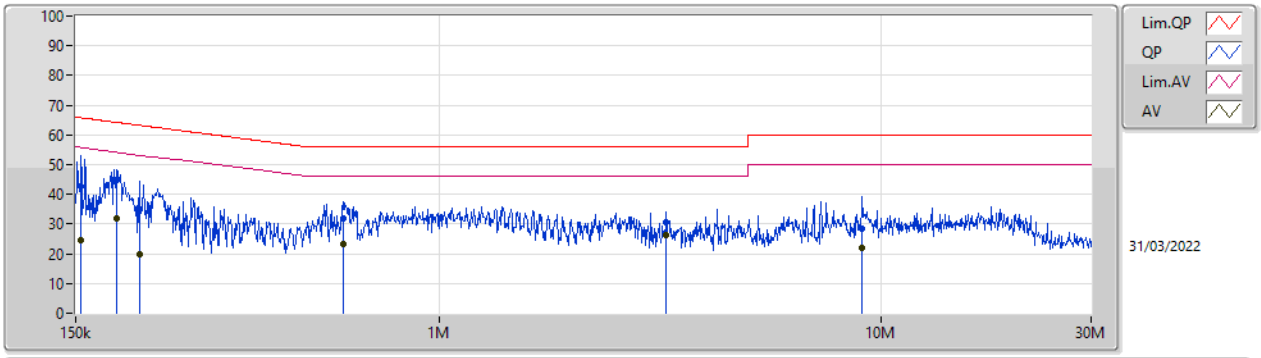
Mode	Result	Type	Freq (Hz)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Condition	Comments
Mode 1	Pass	QP	150.6k	42.31	65.96	-23.65	Line	-
Mode 1	Pass	AV	150.6k	26.70	55.96	-29.26	Line	-
Mode 1	Pass	QP	182.408k	43.18	64.37	-21.19	Line	-
Mode 1	Pass	AV	182.408k	29.40	54.37	-24.97	Line	-
Mode 1	Pass	QP	212.287k	32.26	63.11	-30.85	Line	-
Mode 1	Pass	AV	212.287k	19.44	53.11	-33.67	Line	-
Mode 1	Pass	QP	616.347k	32.85	56.00	-23.15	Line	-
Mode 1	Pass	AV	616.347k	24.15	46.00	-21.85	Line	-
Mode 1	Pass	QP	1.386M	30.88	56.00	-25.12	Line	-
Mode 1	Pass	AV	1.386M	22.30	46.00	-23.70	Line	-
Mode 1	Pass	QP	6.293M	33.92	60.00	-26.08	Line	-
Mode 1	Pass	AV	6.293M	27.35	50.00	-22.65	Line	-
Mode 1	Pass	QP	154.251k	42.67	65.77	-23.10	Neutral	-
Mode 1	Pass	AV	154.251k	24.74	55.77	-31.03	Neutral	-
Mode 1	Pass	QP	186.085k	44.99	64.20	-19.21	Neutral	-
Mode 1	Pass	AV	186.085k	31.81	54.20	-22.39	Neutral	-
Mode 1	Pass	QP	208.925k	34.82	63.25	-28.43	Neutral	-
Mode 1	Pass	AV	208.925k	19.92	53.25	-33.33	Neutral	-
Mode 1	Pass	QP	606.584k	31.95	56.00	-24.05	Neutral	-
Mode 1	Pass	AV	606.584k	23.34	46.00	-22.66	Neutral	-
Mode 1	Pass	QP	3.27M	30.73	56.00	-25.27	Neutral	-
Mode 1	Pass	AV	3.27M	26.41	46.00	-19.59	Neutral	-
Mode 1	Pass	QP	9.085M	28.24	60.00	-31.76	Neutral	-
Mode 1	Pass	AV	9.085M	21.82	50.00	-28.18	Neutral	-

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	150.6k	42.31	65.96	-23.65	19.63	Line	-	22.68	9.69	0.03	9.91
AV	150.6k	26.70	55.96	-29.26	19.63	Line	-	7.07	9.69	0.03	9.91
QP	182.408k	43.18	64.37	-21.19	19.62	Line	-	23.56	9.68	0.03	9.91
AV	182.408k	29.40	54.37	-24.97	19.62	Line	-	9.78	9.68	0.03	9.91
QP	212.287k	32.26	63.11	-30.85	19.62	Line	-	12.64	9.68	0.03	9.91
AV	212.287k	19.44	53.11	-33.67	19.62	Line	-	-0.18	9.68	0.03	9.91
QP	616.347k	32.85	56.00	-23.15	19.63	Line	-	13.22	9.68	0.04	9.91
AV	616.347k	24.15	46.00	-21.85	19.63	Line	-	4.52	9.68	0.04	9.91
QP	1.386M	30.88	56.00	-25.12	19.66	Line	-	11.22	9.68	0.06	9.92
AV	1.386M	22.30	46.00	-23.70	19.66	Line	-	2.64	9.68	0.06	9.92
QP	6.293M	33.92	60.00	-26.08	19.78	Line	-	14.14	9.71	0.15	9.92
AV	6.293M	27.35	50.00	-22.65	19.78	Line	-	7.57	9.71	0.15	9.92

Conducted Emissions at Powerline_Mode 1



Type	Freq	Level	Limit	Margin	Factor	Condition	Comment	Raw	LISN	CL	AT
	(Hz)	(dBuV)	(dBuV)	(dB)	(dB)			(dBuV)	(dB)	(dB)	(dB)
QP	154.251k	42.67	65.77	-23.10	19.63	Neutral	-	23.04	9.69	0.03	9.91
AV	154.251k	24.74	55.77	-31.03	19.63	Neutral	-	5.11	9.69	0.03	9.91
QP	186.085k	44.99	64.20	-19.21	19.61	Neutral	-	25.38	9.67	0.03	9.91
AV	186.085k	31.81	54.20	-22.39	19.61	Neutral	-	12.20	9.67	0.03	9.91
QP	208.925k	34.82	63.25	-28.43	19.61	Neutral	-	15.21	9.67	0.03	9.91
AV	208.925k	19.92	53.25	-33.33	19.61	Neutral	-	0.31	9.67	0.03	9.91
QP	606.584k	31.95	56.00	-24.05	19.62	Neutral	-	12.33	9.67	0.04	9.91
AV	606.584k	23.34	46.00	-22.66	19.62	Neutral	-	3.72	9.67	0.04	9.91
QP	3.27M	30.73	56.00	-25.27	19.73	Neutral	-	11.00	9.69	0.12	9.92
AV	3.27M	26.41	46.00	-19.59	19.73	Neutral	-	6.68	9.69	0.12	9.92
QP	9.085M	28.24	60.00	-31.76	19.83	Neutral	-	8.41	9.73	0.17	9.93
AV	9.085M	21.82	50.00	-28.18	19.83	Neutral	-	1.99	9.73	0.17	9.93

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
WPT	-	-	-	-	-	-	-	-	-	-	-	-
WPC	Pass	PK	119.874k	84.80	106.01	-21.21	20.02	3	Horizontal	0	1.00	-

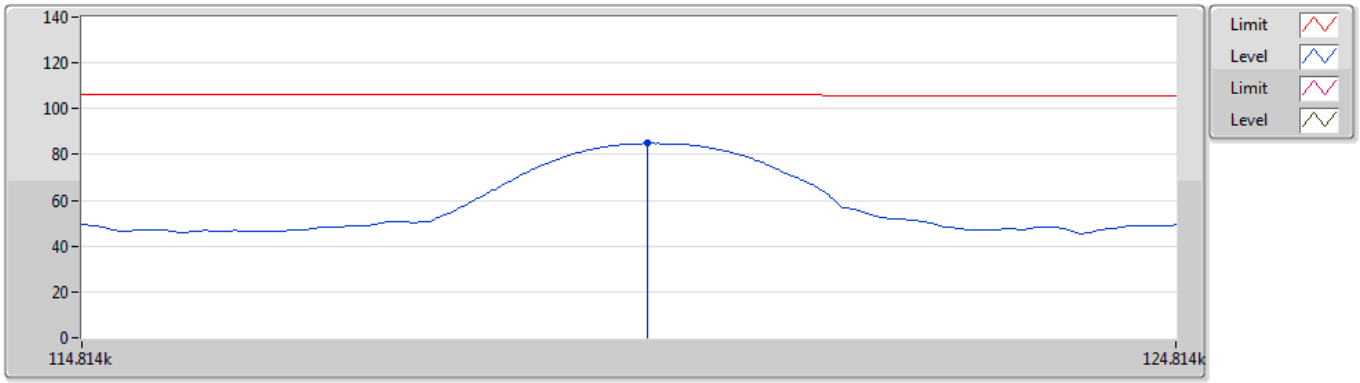
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
WPC	-	-	-	-	-	-	-	-	-	-	-	-
0.136MHz_Adapter	Pass	PK	119.874k	84.80	106.01	-21.21	20.02	3	Horizontal	0	1.00	-
0.136MHz_Adapter	Pass	PK	30.714k	77.52	117.85	-40.33	21.51	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	62.298k	60.91	111.71	-50.80	20.87	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	112.212k	71.79	106.59	-34.80	20.19	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	388.8k	61.36	95.80	-34.44	20.72	3	Horizontal	0	1.00	-
0.136MHz_Adapter	Pass	PK	985.8k	46.30	67.74	-21.44	20.71	3	Horizontal	0	1.00	-
0.136MHz_Adapter	Pass	PK	1.941M	47.15	69.50	-22.35	20.60	3	Horizontal	0	1.00	-

WPC

30/03/2022

0.136MHz_Adapter

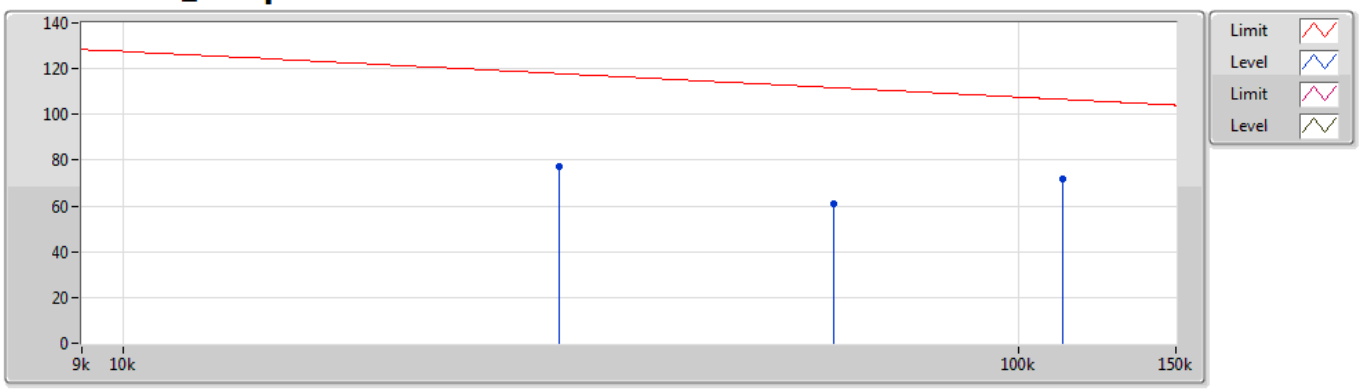


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	119.874k	84.80	106.01	-21.21	20.02	3	Horizontal	0	1.00	-	64.78	19.78	0.24	-

WPC

30/03/2022

0.136MHz_Adapter

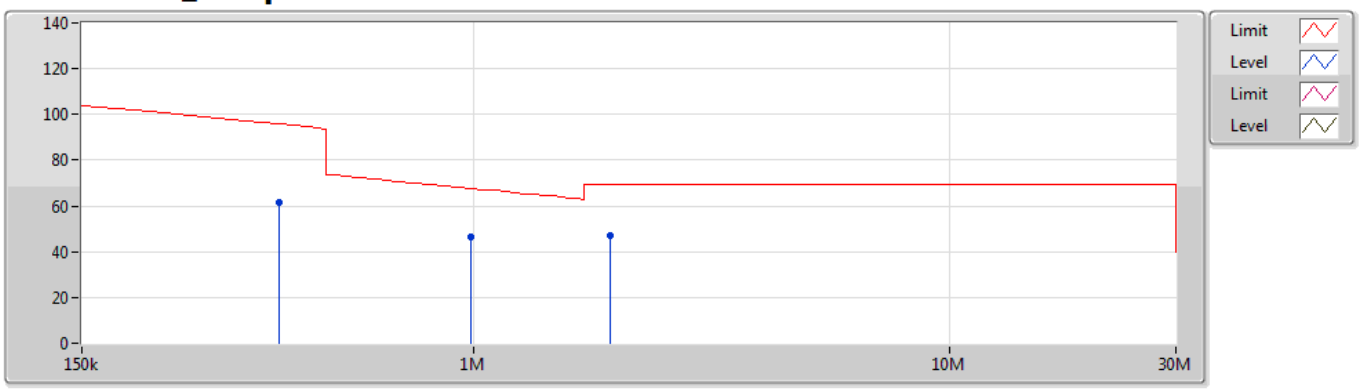


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30.714k	77.52	117.85	-40.33	21.51	3	Horizontal	360	1.00	-	56.01	21.29	0.22	-
PK	62.298k	60.91	111.71	-50.80	20.87	3	Horizontal	360	1.00	-	40.04	20.65	0.22	-
PK	112.212k	71.79	106.59	-34.80	20.19	3	Horizontal	360	1.00	-	51.60	19.96	0.23	-

WPC

30/03/2022

0.136MHz_Adapter



Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	388.8k	61.36	95.80	-34.44	20.72	3	Horizontal	0	1.00	-	40.64	20.45	0.27	-
PK	985.8k	46.30	67.74	-21.44	20.71	3	Horizontal	0	1.00	-	25.59	20.40	0.31	-
PK	1.941M	47.15	69.50	-22.35	20.60	3	Horizontal	0	1.00	-	26.55	20.22	0.38	-

Summary

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
WPT	-	-	-	-	-	-	-	-	-	-	-	-
WPC	Pass	PK	194.9M	38.35	43.50	-5.15	-11.03	3	Horizontal	360	1.00	-

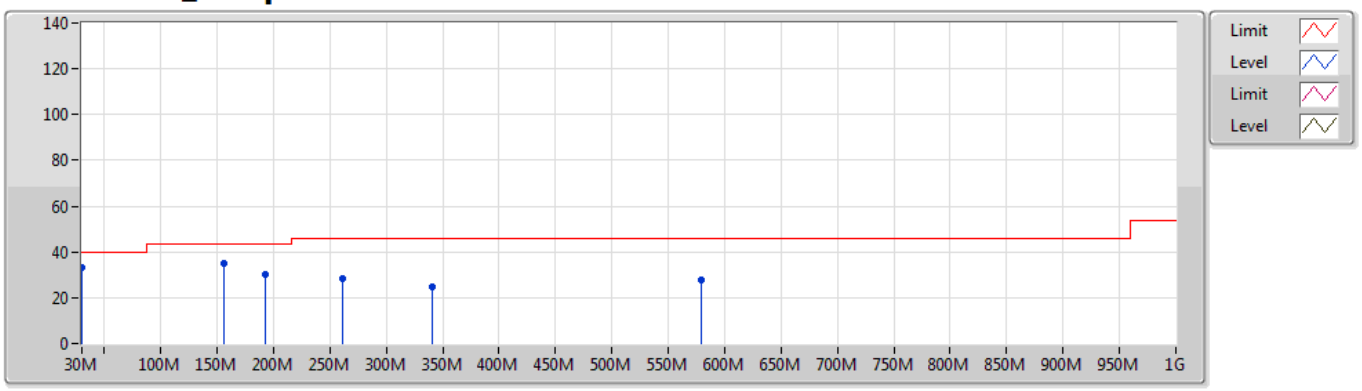
Result

Mode	Result	Type	Freq (Hz)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Factor (dB)	Dist (m)	Condition	Azimuth (°)	Height (m)	Comments
WPC	-	-	-	-	-	-	-	-	-	-	-	-
0.136MHz_Adapter	Pass	PK	30M	33.22	40.00	-6.78	-2.87	3	Vertical	0	1.00	-
0.136MHz_Adapter	Pass	PK	156.1M	34.78	43.50	-8.72	-10.48	3	Vertical	0	1.00	-
0.136MHz_Adapter	Pass	PK	192.96M	29.92	43.50	-13.58	-11.14	3	Vertical	0	1.00	-
0.136MHz_Adapter	Pass	PK	260.86M	28.28	46.00	-17.72	-6.08	3	Vertical	0	1.00	-
0.136MHz_Adapter	Pass	PK	340.4M	24.91	46.00	-21.09	-5.61	3	Vertical	0	1.00	-
0.136MHz_Adapter	Pass	PK	579.02M	27.77	46.00	-18.23	-1.17	3	Vertical	0	1.00	-
0.136MHz_Adapter	Pass	PK	45.52M	33.06	40.00	-6.94	-11.58	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	161.92M	33.21	43.50	-10.29	-10.63	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	194.9M	38.35	43.50	-5.15	-11.03	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	243.4M	34.69	46.00	-11.31	-8.12	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	258.92M	33.78	46.00	-12.22	-6.20	3	Horizontal	360	1.00	-
0.136MHz_Adapter	Pass	PK	352.04M	33.60	46.00	-12.40	-5.12	3	Horizontal	360	1.00	-

WPC

30/03/2022

0.136MHz_Adapter

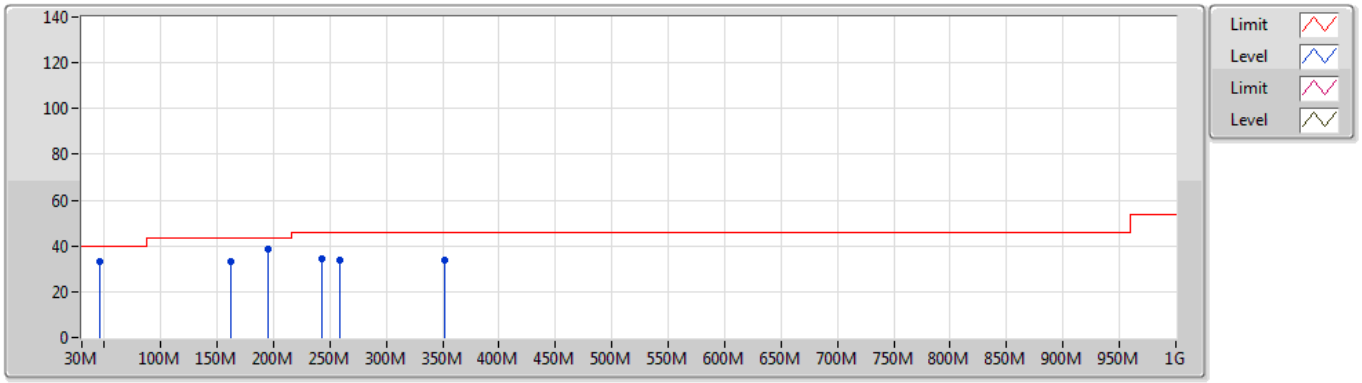


Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	30M	33.22	40.00	-6.78	-2.87	3	Vertical	0	1.00	-	36.09	23.26	0.86	26.99
PK	156.1M	34.78	43.50	-8.72	-10.48	3	Vertical	0	1.00	-	45.26	15.32	1.74	27.54
PK	192.96M	29.92	43.50	-13.58	-11.14	3	Vertical	0	1.00	-	41.06	14.31	1.92	27.37
PK	260.86M	28.28	46.00	-17.72	-6.08	3	Vertical	0	1.00	-	34.36	18.75	2.20	27.03
PK	340.4M	24.91	46.00	-21.09	-5.61	3	Vertical	0	1.00	-	30.52	19.16	2.51	27.28
PK	579.02M	27.77	46.00	-18.23	-1.17	3	Vertical	0	1.00	-	28.94	23.92	3.29	28.38

WPC

30/03/2022

0.136MHz_Adapter



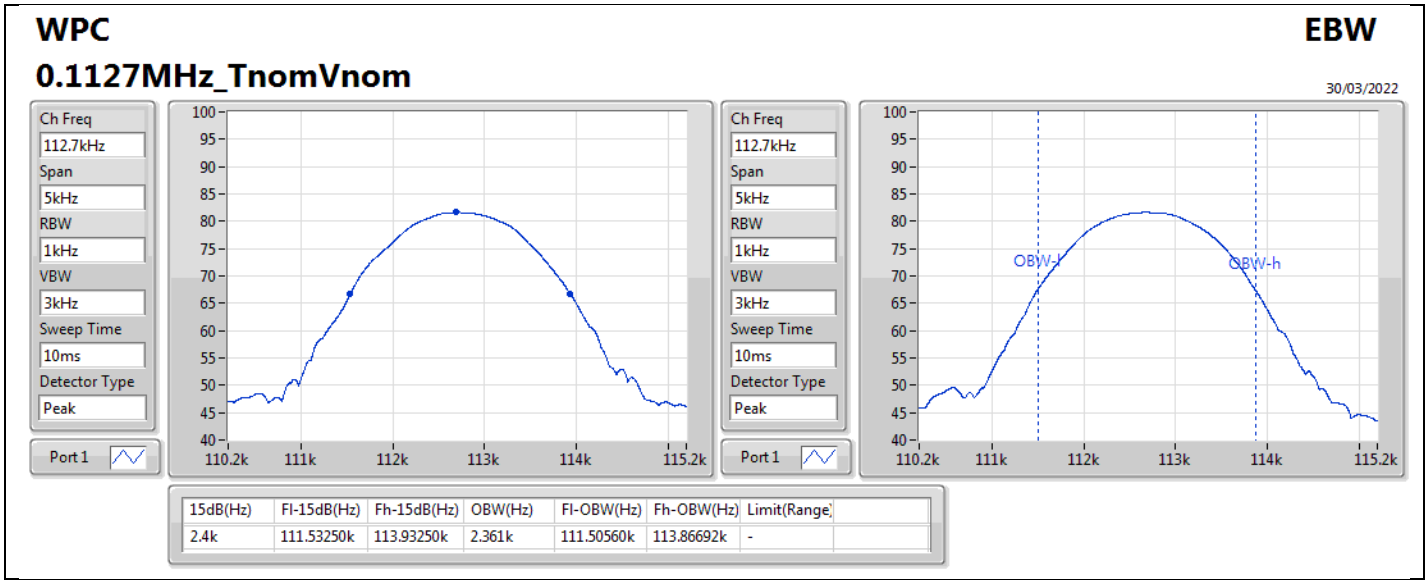
Type	Freq	Level	Limit	Margin	Factor	Dist	Condition	Azimuth	Height	Comment	Raw	AF	CL	PA
	(Hz)	(dBuV/m)	(dBuV/m)	(dB)	(dB)	(m)		(°)	(m)		(dBuV)	(dB)	(dB)	(dB)
PK	45.52M	33.06	40.00	-6.94	-11.58	3	Horizontal	360	1.00	-	44.64	14.97	1.03	27.58
PK	161.92M	33.21	43.50	-10.29	-10.63	3	Horizontal	360	1.00	-	43.84	15.10	1.78	27.51
PK	194.9M	38.35	43.50	-5.15	-11.03	3	Horizontal	360	1.00	-	49.38	14.40	1.93	27.36
PK	243.4M	34.69	46.00	-11.31	-8.12	3	Horizontal	360	1.00	-	42.81	16.82	2.12	27.06
PK	258.92M	33.78	46.00	-12.22	-6.20	3	Horizontal	360	1.00	-	39.98	18.64	2.19	27.03
PK	352.04M	33.60	46.00	-12.40	-5.12	3	Horizontal	360	1.00	-	38.72	19.67	2.56	27.35

Summary

Mode	15dB (Hz)	Fl-15dB (Hz)	Fh-15dB (Hz)	OBW (Hz)	Limit (Range)
0.1127M	-	-	-	-	-
WPC	2.4k	111.53250k	113.93250k	2.361k	-

Result

Mode	Result	15dB (Hz)	Fl-15dB (Hz)	Fh-15dB (Hz)	OBW (Hz)	Fl-OBW (Hz)	Fh-OBW (Hz)	Limit (Range)
WPC	-	-	-	-	-	-	-	-
0.1127MHz_TnomVnom	Pass	2.4k	111.53250k	113.93250k	2.361k	111.50560k	113.86692k	-



15dB(Hz)	Fl-15dB(Hz)	Fh-15dB(Hz)	OBW(Hz)	Fl-OBW(Hz)	Fh-OBW(Hz)	Limit(Range)
2.4k	111.53250k	113.93250k	2.361k	111.50560k	113.86692k	-